



## SEQUENCE LISTING

<110> Sanders, Bob G.  
Kline, Kimberly  
Yu, Weiping  
Liu, Hui  
Hantash, Feras

<120> Tocopherol Associated Protein and Uses Thereof

<130> D6453CIP

<140> US 10/696,699  
<141> 2003-10-29

<150> US 10/419,629  
<151> 2003-04-21

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gttctcagcc	tccaaacagg	acctgctgag	gaccaagatg	ctggatgcca	250
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cgggagtggt	agctgcttct	gcaagagtgt	gccaccaga	ccacaaagtt	350
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gcctcaagca	tctctggaag	cctgctgtgg	aggcctatgg	agagtttctc	450
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cagatggagc	ggatgttggt	tttgggattt	tcctgaagac	caagatggga	900
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caactcccac	ctggtccctg	aagatgggac	cctcacctgc	agtgatcctg	1000
gcattctatg	cctgcggttt	gacaacacct	acagcttcat	tcatgccaa	1050
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1137

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 Ser Gly Ser Met Trp Ser Ser Glu Ser Lys Arg Thr Leu Thr Thr  
                   35                  40                  45  
 Ser Leu Ala Trp Gln Pro Pro Glu Val Ile Gln Gln Tyr Leu Ser  
                   50                  55                  60  
 Gly Gly Met Cys Gly Tyr Asp Leu Asp Gly Cys Pro Val Trp Tyr  
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 Asp Ile Ile Gly Pro Lys Asp Ala Lys Gly Leu Leu Phe Ser Ala  
                   80                  85                  90  
 Ser Lys Gln Asp Leu Leu Arg Thr Lys Met Arg Glu Cys Glu Leu  
                   95                  100                 105  
 Leu Leu Gln Glu Cys Ala His Gln Thr Thr Lys Leu Gly Arg Lys  
                  110                 115                 120  
 Val Glu Thr Ile Thr Ile Ile Tyr Asp Cys Glu Gly Leu Gly Leu  
                  125                 130                 135  
 Lys His Leu Trp Lys Pro Ala Val Glu Ala Tyr Gly Glu Phe Leu  
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 Cys Met Phe Glu Glu Asn Tyr Pro Glu Thr Leu Lys Arg Leu Phe  
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 Val Val Lys Ala Pro Lys Leu Phe Pro Val Ala Tyr Asn Leu Ile  
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 Lys Pro Phe Leu Ser Glu Asp Thr Arg Lys Lys Ile Met Val Leu  
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 Gly Ala Asn Tyr Lys Glu Val Leu Leu Lys His Ile Ser Pro Asp  
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 Gln Val Pro Val Glu Tyr Gly Gly Thr Met Thr Asp Pro Asp Gly  
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 Asn Pro Lys Cys Lys Ser Lys Ile Asn Tyr Gly Gly Asp Ile Pro  
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                  245                 250                 255  
 Ser Val Gln Ile Ser Arg Gly Ser Ser His Gln Val Glu Tyr Glu  
                  260                 265                 270  
 Ile Leu Phe Pro Gly Cys Val Leu Arg Trp Gln Phe Met Ser Asp  
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Gly	Ala	Asp	Val	Gly	Phe	Gly	Ile	Phe	Leu	Lys	Thr	Lys	Met	Gly
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Glu	Arg	Gln	Arg	Ala	Gly	Glu	Met	Thr	Glu	Val	Leu	Pro	Asn	Gln
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Arg	Tyr	Asn	Ser	His	Leu	Val	Pro	Glu	Asp	Gly	Thr	Leu	Thr	Cys
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Ser	Asp	Pro	Gly	Ile	Tyr	Val	Leu	Arg	Phe	Asp	Asn	Thr	Tyr	Ser
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Phe	Ile	His	Ala	Lys	Lys	Val	Asn	Phe	Thr	Val	Glu	Val	Leu	Leu
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Thr	Pro	Lys												

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 <213> *Homo sapiens*

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aagtcggagg	ccatgctccg	gaagcatgtg	gagttccgaa	agcaaaagga	200
cattgacaac	atcattagct	ggcagcctcc	agaggtgatc	caacagtatc	250
tgtcactgga	tgccaagggt	ctgctgttct	cagcctccaa	acaggacctg	300
ctgaggacca	agatgctgga	tgccaagggt	ctgctgttct	cagcctccaa	350
acaggacctg	ctgaggacca	agatgcggga	gtgtgagctg	cttctgcaag	400
agtgtgcccc	ccagaccaca	aagttgggga	ggaaggtgga	gaccatcacc	450
ataatttatg	actgcgaggg	gcttggcctc	aagcatctct	ggaagcctgc	500
tgtggaggcc	tatggagagt	ttctctgcat	gtttgaggaa	aattatcccg	550
aaacactgaa	gcgtcttttt	gttggttaaag	cccccaaact	gtttcctgtg	600
gcctataacc	tcatcaaacc	cttcctgagt	gaggacactc	gtaagaagat	650
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ctgaccaggt	gcctgtggag	tatgggggcg	ccatgactga	ccctgatgga	750
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gtattatgtg	cgagaccagg	tgaaacagca	gtatgaacac	agcgtgcaga	850
tttcccgtgg	ctcctcccac	caagtggagt	atgagatcct	cttccttggc	900
tgtgtcctca	ggtggcagtt	tatgtcagat	ggagcggatg	ttggtttttg	950
gattttcctg	aagaccaaga	tgaggagagag	gcagcgggca	ggggagatga	1000
cagaggtgct	gcccacccag	aggtacaact	cccacctggg	ccctgaagat	1050
gggaccctca	cctgcagtga	tcctggcatc	tatgtcctgc	ggtttgacaa	1100
cacctacagc	ttcattcatg	ccaagaaggt	caatttcact	gtggagggtcc	1150
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<220>  
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 Pro Asn Pro Asp Asp Tyr Phe Leu Leu Arg Trp Leu Arg Ala Arg  
                   35                  40                  45  
 Ser Phe Asp Leu Gln Lys Ser Glu Ala Met Leu Arg Lys His Val  
                   50                  55                  60  
 Glu Phe Arg Lys Gln Lys Asp Ile Asp Asn Ile Ile Ser Trp Gln  
                   65                  70                  75  
 Pro Pro Glu Val Ile Gln Gln Tyr Leu Ser Gly Gly Met Cys Gly  
                   80                  85                  90  
 Tyr Asp Leu Asp Gly Cys Pro Val Trp Tyr Asp Ile Ile Gly Pro  
                   95                  100                 105  
 Leu Asp Ala Lys Gly Leu Leu Phe Ser Ala Ser Lys Gln Asp Leu  
                  110                 115                 120  
 Leu Arg Thr Lys Met Arg Glu Cys Glu Leu Leu Leu Gln Glu Cys  
                  125                 130                 135  
 Ala His Gln Thr Thr Lys Leu Gly Arg Lys Val Glu Thr Ile Thr  
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 Ile Ile Tyr Asp Cys Glu Gly Leu Gly Leu Lys His Leu Trp Lys  
                  155                 160                 165  
 Pro Ala Val Glu Ala Tyr Gly Glu Phe Leu Cys Met Phe Glu Glu  
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 Asn Tyr Pro Glu Thr Leu Lys Arg Leu Phe Val Val Lys Ala Pro  
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 Lys Leu Phe Pro Val Ala Tyr Asn Leu Ile Lys Pro Phe Leu Ser  
                  200                 205                 210  
 Glu Asp Thr Arg Lys Lys Ile Met Val Leu Gly Ala Asn Trp Lys  
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 Glu Val Leu Leu Lys His Ile Ser Pro Asp Gln Val Pro Val Glu  
                  230                 235                 240  
 Tyr Gly Gly Thr Met Thr Asp Pro Asp Gly Asn Pro Lys Cys Lys  
                  245                 250                 255  
 Ser Lys Ile Asn Tyr Gly Gly Asp Ile Pro Arg Lys Tyr Tyr Val  
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 Arg Asp Gln Val Lys Gln Gln Tyr Glu His Ser Val Gln Ile Ser  
                  275                 280                 285  
 Arg Gly Ser Ser His Gln Val Glu Tyr Glu Ile Leu Phe Pro Gly  
                  290                 295                 300  
 Cys Val Leu Arg Trp Gln Phe Met Ser Asp Gly Ala Asp Val Gly  
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Leu	Val	Pro	Glu	Asp	Gly	Thr	Leu	Thr	Cys	Ser	Asp	Pro	Gly	Ile	
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Tyr	Val	Leu	Arg	Phe	Asp	Asn	Thr	Tyr	Ser	Phe	Ile	His	Ala	Lys	
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Lys	Val	Asn	Phe	Thr	Val	Glu	Val	Leu	Leu	Pro	Asp	Lys	Ala	Ser	
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 cggcgat 57

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 <212> PRT  
 <213> *Homo sapiens*  
 <220>  
 <221> PEPTIDE  
 <223> 16 amino acids from the c-terminus of TAP attached  
 to keyhole limpet hemocyanin

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<210> 9  
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 ggaaggtgga gaccatcacc ataatttatg actgcgaggg gcttggcctc 150  
 aagcatctct ggaagcctgc tgtggaggcc tatggagagt ttctctgcat 200  
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 ccatgactga ccctgatgga aaccccaagt gcaaatacaa gatcaactac 450  
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<213>      Homo sapiens

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<223>      deletion mutant TAP-882

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Lys Leu Gly Arg Lys Val Glu Thr Ile Thr Ile Ile Tyr Asp Cys
                    35              40              45
Glu Gly Leu Gly Leu Lys His Leu Trp Lys Pro Ala Val Glu Ala
                    50              55              60
Tyr Gly Glu Phe Leu Cys Met Phe Glu Glu Asn Tyr Pro Glu Thr
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Leu Lys Arg Leu Phe Val Val Lys Ala Pro Lys Leu Phe Pro Val
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Ala Tyr Asn Leu Ile Lys Pro Phe Leu Ser Glu Asp Thr Arg Lys
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Lys Ile Met Val Leu Gly Ala Asn Trp Lys Glu Val Leu Leu Lys
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His Ile Ser Pro Asp Gln Val Pro Val Glu Tyr Gly Gly Thr Met
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Thr Asp Pro Asp Gly Asn Pro Lys Cys Lys Ser Lys Ile Asn Tyr
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Gly Gly Asp Ile Pro Arg Lys Tyr Tyr Val Arg Asp Gln Val Lys
                    155             160             165
Gln Gln Tyr Glu His Ser Val Gln Ile Ser Arg Gly Ser Ser His
                    170             175             180
Gln Val Glu Tyr Glu Ile Leu Phe Pro Gly Cys Val Leu Arg Trp
                    185             190             195
Gln Phe Met Ser Asp Gly Ala Asp Val Gly Phe Gly Ile Phe Leu
                    200             205             210
Lys Thr Lys Met Gly Glu Arg Gln Arg Ala Gly Glu Met Thr Glu
                    215             220             225
Val Leu Pro Asn Gln Arg Tyr Asn Ser His Leu Val Pro Glu Asp
                    230             235             240

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Gly	Thr	Leu	Thr	Cys	Ser	Asp	Pro	Gly	Ile	Tyr	Val	Leu	Arg	Phe	
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Asp	Asn	Thr	Tyr	Ser	Phe	Ile	His	Ala	Lys	Lys	Val	Asn	Phe	Thr	
				260					265					270	
Val	Glu	Val	Leu	Leu	Pro	Asp	Lys	Ala	Ser	Glu	Glu	Lys	Met	Lys	
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<220>  
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catgactgac	cctgatggaa	accccaagt	caaattccaag	atcaactacg	250
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 <213> *Homo sapiens*

<220>  
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<400> 17

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Phe	Leu	Ser	Glu	Asp	Thr	Arg	Lys	Lys	Ile	Met	Val	Leu	Gly	Ala	
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Asn	Trp	Lys	Glu	Val	Leu	Leu	Lys	His	Ile	Ser	Pro	Asp	Gln	Val	
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Pro	Val	Glu	Tyr	Gly	Gly	Thr	Met	Thr	Asp	Pro	Asp	Gly	Asn	Pro	
				65					70					75	
Lys	Cys	Lys	Ser	Lys	Ile	Asn	Tyr	Gly	Gly	Asp	Ile	Pro	Arg	Lys	
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Tyr	Tyr	Val	Arg	Asp	Gln	Val	Lys	Gln	Gln	Tyr	Glu	His	Ser	Val	
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Gln	Ile	Ser	Arg	Gly	Ser	Ser	His	Gln	Val	Glu	Tyr	Glu	Ile	Leu	
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Phe	Pro	Gly	Cys	Val	Leu	Arg	Trp	Gln	Phe	Met	Ser	Asp	Gly	Ala	
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Asp	Val	Gly	Phe	Gly	Ile	Phe	Leu	Lys	Thr	Lys	Met	Gly	Glu	Arg	
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Gln	Arg	Ala	Gly	Glu	Met	Thr	Glu	Val	Leu	Pro	Asn	Gln	Arg	Tyr	
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Asn	Ser	His	Leu	Val	Pro	Glu	Asp	Gly	Thr	Leu	Thr	Cys	Ser	Asp	
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Pro	Gly	Ile	Tyr	Val	Leu	Arg	Phe	Asp	Asn	Thr	Tyr	Ser	Phe	Ile	
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His	Ala	Lys	Lys	Val	Asn	Phe	Thr	Val	Glu	Val	Leu	Leu	Pro	Asp	
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Lys

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<220>  
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cctgaagacc	aagatgggag	agaggcagcg	ggcaggggag	atgacagagg	250
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ctcacctgca	gtgatcctgg	catctatgtc	ctgcggtttg	acaacaccta	350
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aaataa					456

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				20					25					30	
Gln	Ile	Ser	Arg	Gly	Ser	Ser	His	Gln	Val	Glu	Tyr	Glu	Ile	Leu	
				35					40					45	
Phe	Pro	Gly	Cys	Val	Leu	Arg	Trp	Gln	Phe	Met	Ser	Asp	Gly	Ala	
				50					55					60	
Asp	Val	Gly	Phe	Gly	Ile	Phe	Leu	Lys	Thr	Lys	Met	Gly	Glu	Arg	
				65					70					75	
Gln	Arg	Ala	Gly	Glu	Met	Thr	Glu	Val	Leu	Pro	Asn	Gln	Arg	Tyr	
				80					85					90	
Asn	Ser	His	Leu	Val	Pro	Glu	Asp	Gly	Thr	Leu	Thr	Cys	Ser	Asp	
				95					100					105	
Pro	Gly	Ile	Tyr	Val	Leu	Arg	Phe	Asp	Asn	Thr	Tyr	Ser	Phe	Ile	
				110					115					120	
His	Ala	Lys	Lys	Val	Asn	Phe	Thr	Val	Glu	Val	Leu	Leu	Pro	Asp	
				125					130					135	
Lys	Ala	Ser	Glu	Glu	Lys	Met	Lys	Gln	Leu	Gly	Ala	Gly	Thr	Pro	
				140					145					150	
Lys															